

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A synthetic peptide factor comprising ~~the amino acid residues 33 to 42 of murine epidermal growth factor having the sequence of SEQ ID NO:2~~ wherein:
 - a) said sequence is modified such that at least one or both of i) SEQ ID NO:2 tyrosine amino acid residue 5 and ii) SEQ ID NO:2 arginine amino acid residue 9 are substituted with a tyrosine analogue or arginine analogue, respectively; and
 - b) the synthetic peptide factor is capable of binding to laminin receptors.
2. (currently amended) The synthetic peptide factor of claim 1, having an N-terminal amino acid residue and a C-terminal amino acid residue, wherein the N-terminal amino acid residue of ~~the murine epidermal growth factor~~ is chemically modified by the addition of an amino acid capping moiety, the C-terminal amino acid residue of ~~the murine epidermal growth factor~~ is chemically modified by the addition of an amino acid capping moiety, or a ~~murine epidermal growth factor~~ cysteine residue thiol group is chemically modified by the addition of an amino acid capping moiety to the cysteine residue thiol group.
3. (previously presented) The synthetic peptide factor of claim 1, wherein the SEQ ID NO:2 tyrosine residue 5 is substituted by tetrahydroisoquinoline-3-carboxylic acid.
4. (previously presented) The synthetic peptide factor of claim 1, wherein the SEQ ID NO:2 arginine residue 9 is substituted by Citrulline.

5. (currently amended) A method of antagonizing a laminin receptor in a patient, the method comprising the steps of:

a) administering to the patient a medicament comprising a synthetic peptide factor comprising ~~the amino acid residues 33 to 42 of murine epidermal growth factor having the sequence of SEQ ID NO:2~~ wherein said sequence is modified such that at least one or both of i) SEQ ID NO:2 tyrosine amino acid residue 5 and ii) SEQ ID NO:2 arginine amino acid residue 9 are substituted with a tyrosine analogue or arginine analogue, respectively, and

b) binding the synthetic peptide factor to the laminin receptor.

6. (currently amended) A method of agonizing a laminin receptor in a patient, the method comprising the steps of:

a) administering to the patient a medicament comprising a synthetic peptide factor comprising ~~the amino acid residues 33 to 42 of murine epidermal growth factor having the sequence of SEQ ID NO:2~~ wherein said sequence is modified such that at least one or both of i) SEQ ID NO:2 tyrosine amino acid residue 5 and ii) SEQ ID NO:2 arginine amino acid residue 9 are substituted with a tyrosine analogue or arginine analogue, respectively, and

b) binding the synthetic peptide factor to the laminin receptor.

7. (previously presented) The method of claim 6 wherein said medicament is for treating endothelial cell wounding.

8. (previously presented) The method according to claim 6 wherein said medicament is for treating retinopathy of prematurity.

9. (previously presented) The synthetic peptide factor of claim 2, wherein the SEQ ID NO:2 tyrosine residue 5 is substituted by tetrahydroisoquinoline-3-carboxylic acid.

10. (previously presented) The synthetic peptide factor of claim 2, wherein the SEQ ID NO:2 arginine residue 9 is substituted by Citrulline.

11. (canceled)
12. (currently amended) The method of claim 5, wherein said synthetic peptide has an N-terminal amino acid residue and a C-terminal amino acid residue, wherein the N-terminal amino acid residue ~~of the murine epidermal growth factor~~ is chemically modified by the addition of an amino acid capping moiety, the C-terminal amino acid residue ~~of the murine epidermal growth factor~~ is chemically modified by the addition of an amino acid capping moiety, or a ~~murine epidermal growth factor~~ cysteine residue thiol group is chemically modified by the addition of an amino acid capping moiety to the cysteine residue thiol group.
13. (previously presented) The method of claim 12, wherein the SEQ ID NO:2 tyrosine residue 5 is substituted by tetrahydroisoquinoline-3-carboxylic acid.
14. (previously presented) The method of claim 12 wherein the SEQ ID NO:2 arginine residue 9 is substituted by Citrulline.
15. (currently amended) The method of claim 6, wherein said synthetic peptide has an N-terminal amino acid residue and a C-terminal amino acid residue wherein the N-terminal amino acid residue ~~of the murine epidermal growth factor~~ is chemically modified by the addition of an amino acid capping moiety, the C-terminal amino acid residue ~~of the murine epidermal growth factor~~ is chemically modified by the addition of an amino acid capping moiety, or a ~~murine epidermal growth factor~~ cysteine residue thiol group is chemically modified by the addition of an amino acid capping moiety to the cysteine residue thiol group.
16. (previously presented) The method of claim 15, wherein the SEQ ID NO:2 tyrosine residue 5 is substituted by tetrahydroisoquinoline-3-carboxylic acid.

17. (previously presented) The method of claim 15 wherein the SEQ ID NO:2 arginine residue 9 is substituted by Citrulline.
18. (previously presented) The method of claim 15 wherein said medicament is for treatment of retinopathy of prematurity.
19. (currently amended) A synthetic peptide factor comprising an N-terminal amino acid residue and a C-terminal amino acid residue, and the amino acid residues 33 to 42 of murine epidermal growth factor having the sequence of SEQ ID NO:2, wherein
 - a) said sequence is modified by at least one first modification and optionally by at least one second modification; and
 - b) the synthetic peptide factor is capable of binding to laminin receptors, wherein said first modification is selected from the group consisting of: substitution of SEQ ID NO:2 tyrosine amino acid residue 5 with a tyrosine analogue and substitution of SEQ ID NO: 2 arginine amino acid residue 9 with an arginine analogue; and wherein said second modification is selected from the group consisting of: chemical modification of the N-terminal amino acid residue of the murine epidermal growth factor by the addition of an amino acid capping moiety; chemical modification of the C-terminal amino acid residue of the murine epidermal growth factor by the addition of an amino acid capping moiety; chemical modification of a murine epidermal growth factor cysteine residue thiol group by the addition of an amino acid capping moiety to the cysteine residue thiol group; replacement of a peptide bond with a protease-resistant peptide bond isostere[,,]; replacement of a glycine residue with [[αα-dialkyl]] an α,α-dialkyl substituted amino acid; and stabilisation of a helical turn of the peptide using suitable intra chain linkers.
20. (currently amended) A synthetic peptide factor comprising the amino acid sequence SEQ ID NO:2 and having an N-terminal amino acid residue and a C-terminal amino acid residue, and amino acid residues 33 to 42 of murine epidermal growth factor having the sequence of SEQ ID NO:2, wherein

a) said sequence is modified by at least one first modification and by at least one second modification; and

b) the synthetic peptide factor is capable of binding to laminin receptors, wherein said first modification is selected from the group consisting of: substitution of SEQ ID NO:2 tyrosine amino acid residue 5 with a tyrosine analogue and substitution of SEQ ID NO: 2 arginine amino acid residue 9 with an arginine analogue; and

wherein said second modification is selected from the group consisting of: chemical modification of the N-terminal amino acid residue ~~of the murine epidermal growth factor~~ by the addition of an amino acid capping moiety; chemical modification of the C-terminal amino acid residue ~~of the murine epidermal growth factor~~ by the addition of an amino acid capping moiety; chemical modification of a ~~murine epidermal growth factor~~ cysteine residue thiol group by the addition of an amino acid capping moiety to the cysteine residue thiol group; replacement of a peptide bond with a protease-resistant peptide bond isostere[[],]; replacement of a glycine residue with [[$\alpha\alpha$ -dialkyl]] an α,α -dialkyl substituted amino acid; and stabilisation of a helical turn of the peptide using suitable intra chain linkers.

21. (canceled)

22. (previously presented) The synthetic peptide factor according to claim 19, wherein the SEQ ID NO:2 tyrosine amino acid residue 5 is substituted by tetrahydroisoquinoline-3-carboxylic acid.

23. (previously presented) The synthetic peptide factor according to claim 19 wherein the SEQ ID NO:2 arginine amino acid residue 9 is substituted by Citrulline.

24. (currently amended) A method of antagonizing a laminin receptor in a patient, the method comprising the steps of:

a) administering to the patient a medicament comprising a synthetic peptide factor comprising the amino acid sequence SEQ ID NO:2 and having an N-terminal amino acid residue and a C-terminal amino acid residue;, ~~and having the sequence of SEQ ID NO:2,~~

wherein said sequence is modified by at least one first modification and optionally by at least one second modification;

wherein said first modification is selected from the group consisting of: substitution of SEQ ID NO:2 tyrosine amino acid residue 5 with a tyrosine analogue and substitution of arginine amino acid residue 9 with an arginine analogue; and

wherein said second modification is selected from the group consisting of: chemical modification of the N-terminal amino acid residue ~~of the murine epidermal growth factor~~ by the addition of an amino acid capping moiety; chemical modification of the C-terminal amino acid residue ~~of the murine epidermal growth factor~~ by the addition of an amino acid capping moiety; chemical modification of a ~~murine epidermal growth factor~~ cysteine residue thiol group by the addition of an amino acid capping moiety to the cysteine residue thiol group; replacement of a peptide bond with a protease-resistant peptide bond isostere[[],]; replacement of a glycine residue with [[$\alpha\alpha$ -dialkyl]] an α,α -dialkyl substituted amino acid; and stabilisation of a helical turn of the peptide using suitable intra chain linkers; and

b) binding the synthetic peptide factor to the laminin receptor.

25. (currently amended) A method of agonizing a laminin receptor in a patient, the method comprising the steps of:

a) administering to the patient a medicament comprising a synthetic peptide factor comprising the amino acid sequence SEQ ID NO:2 and having an N-terminal amino acid residue and a C-terminal amino acid residue; ~~having the sequence of SEQ ID NO:2,~~

wherein said sequence is modified by at least one first modification and optionally by at least one second modification;

wherein said first modification is selected from the group consisting of: substitution of SEQ ID NO:2 tyrosine amino acid residue 5 with a tyrosine analogue and substitution of SEQ ID NO:2 arginine amino acid residue 9 with an arginine analogue; and

wherein said second modification is selected from the group consisting of: chemical modification of the N-terminal amino acid residue of the murine epidermal growth factor by the addition of an amino acid capping moiety; chemical modification of the C-terminal amino acid residue of the murine epidermal growth factor by the addition of an amino acid capping moiety; chemical modification of a murine epidermal growth factor cysteine residue thiol group by the addition of an amino acid capping moiety to the cysteine residue thiol group; replacement of a peptide bond with a protease-resistant peptide bond isostere[[],]; replacement of a glycine residue with [[$\alpha\alpha$ -dialkyl]] an α,α -dialkyl substituted amino acid; and stabilisation of a helical turn of the peptide using suitable intra chain linkers; and

- b) binding the synthetic peptide factor to the laminin receptor.

26. (previously presented) The method according to claim 25 wherein said medicament is for treating endothelial cell wounding.

27. (previously presented) The method according to claim 25 wherein said medicament is for treatment of retinopathy of prematurity.